

SAFETY & HEALTH NOTE

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Air Sampler is a Potential Shock Hazard

An inadequate electrical ground in SAIC/RADECO model H809V air samplers may cause an electrical shock to persons using the samplers. A Radiological Control Technician (RCT) in Oak Ridge was mildly shocked with an estimated 76 volts while installing the metal filter holder on a SAIC/RADECO H809V high volume air sampler on October, 10, 1997. The air sampler was attached to a standard 110 VAC wall receptacle. The RCT was examined at the Oak Ridge National Laboratory (ORNL) medical facility and released with no apparent ill effects.

An inspection of the air sampler in question determined that the "hot" wire to the motor was pinched between a motor cooling fin and the sampler housing when the sampler was assembled. The pinched wire led to a break in the wire insulation and caused the filter holder to become energized. The circuit breaker did not trip because the motor was electrically isolated from the sampler housing which is the end of the terminal end of the ground wire. Also electrically isolated from the housing was the anodized aluminum filter holder mount.

The manufacturer communicated that the H809V sampler motor had been changed several years ago from having a metal housing to a plastic housing. This design change was not evaluated for ground circuit impact. Until an adequate ground circuit is

designed, production and sales of this sampler has been stopped by the manufacturer. The manufacturer offers supply retro kits to H809V sampler owners to correct the faulty ground circuit.

If your site has H809V air samplers, they should be inspected for pinched wires and removed from operations until replacement parts have been received from the manufacturer. To request a retrofit kit, call SAIC at 1-800-962-1632.



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